Exhibit R-2, PB 2010 Unite	d States Speci	al Operations	Command RD	T&E Budget l	tem Justifica	tion		DATE: May 2	009	
APPROPRIATION/BUDGE 0400 - Research, Developm Technology Development (A	nent, Test & Ev	aluation, Defe	nse-Wide/BA 3	3 - Advanced		MENCLATUR BB SO Advanc	-	/ Development		
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	54.695	65.684	31.675						Cont.	Cont.
S200: SO Advanced Technology Development	54.695	65.684	31.675						Cont.	Cont.

A. Mission Description and Budget Item Justification

This program element conducts rapid prototyping and Advanced Technology Demonstrations. It provides a means for demonstrating and evaluating emerging/ advanced technologies in as realistic an operational environment as possible by Special Operations Forces (SOF) users. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The program element also addresses projects that are a result of unique joint special mission or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase.

B. Program Change Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	
Previous President's Budget	41.251	28.930	27.191		
Current BES/President's Budget	54.695	65.684	31.675		
Total Adjustments	13.444	36.754	4.484		
Congressional Program Reductions	0.000	-0.166			
Congressional Rescissions	0.000	0.000			
Total Congressional Increases	0.000	36.920			
Total Reprogrammings	13.691	0.000			
SBIR/STTR Transfer	-0.247				
additional testing funds required to transition items from the SOF			2.000		
national forces to the theater forces					
Rapid Exploitation of Innovative Technology effort			2.924		
economic assumptions			-0.440		

Congressional Increase Details (\$ in Millions)

Project: S200, Improved Information Transfer for Special Forces

Project: S200, **Advanced Distributed Aperture System**

FY 2008		FY 2009
	0.000	2.400
	0.000	21.120

DATE: May 2009

0.000

1.000

Exhibit R 2, 1 B 20 10 Office Otates operations confining RD RC Budget		DATE: May 2000	
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technological	ogy Development	
Congressional Increase Details (\$ in Millions)		FY 2008	FY 2009
Project: S200, Advanced Craft Tech Demonstrations to Quantify and M	itigate Operator Injury	0.000	2.000
Project: S200, Autonomous Rendezvous/Formation Flight		0.000	2.000
Project: S200, Partnership for Defense Innovation WiFi Test Laboratory	•	0.000	2.000
Project: S200, Field Experimentation Program for Special Operations		0.000	1.600
Project: S200, Micro-Power Special Operations Generator		0.000	1.600
Project: S200, Photovoltaic Power Supply		0.000	2.400
Project: S200, Small Assault Vehicle Expeditionary		0.000	0.800

Change Summary Explanation

Project: S200, Technology Infusion Cell

Funding:

FY08: Net increase of \$13.444 million is due to a Small Business Innovative Research (SBIR) account adjustment (-\$.247 million), an increase of \$9.040 million for foliage penetration efforts, an increase of \$0.100 million for a Polymer Light Emitting Diode initiative, FY08 Omnibus reprogramming (FY08-31PA) for the 11 Meter RIB Craft Design Congressional add (-\$0.774 million), DD 1415-3 (FY08-30 IR) increase of \$3.395 million for two Congressional adds reprogrammed to the correct PE for proper execution, DD 1415-3 (FY08-56 IR) increase of \$0.966 million for Congressional add Responsive Textiles, and DD 1415-3 (FY08-41 IR) increase of \$0.964 million for Photovoltaic Power Supply for Autonomous Sensors.

FY09: Net increase of \$36.754 million is due to a decrease for Section 8101(-\$0.166 million) and an increase of \$36.920 million for the following Congressional Adds:

Improved Information Transfer for Special Forces (\$2.400 million)

Advanced Distributed Aperture System (\$21.120 million)

Advanced Craft Tech Demonstrations to Quantify and Mitigate Operator Injury (\$2.000 million)

Exhibit R-2, PB 2010 United States Special Operations Command RDT&E Budget Item Justification

Autonomous Rendezvous/Formation Flight (\$2.000 million)

Partnership for Defense Innovation WiFi Test Laboratory (\$2.000 million)

Field Experimentation Program for Special Operations (\$1.600 million)

Micro-Power Special Operations Generator (\$1.600 million)

UNCLASSIFIED

R-1 Line Item #65 Page 2 of 15

Exhibit R-2, PB 2010 United States Special Operations Command RDT&E Budget	Item Justification	DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology	Development
Photovoltaic Power Supply (\$2.400 million) Small Assault Vehicle Expeditionary (\$0.800 million) Technology Infusion Cell (\$1.000 million)		
FY10: Net increase of \$4.484 million is due to the additional testing funds remillion, additional funding to support the Rapid Exploitation of Innovative Tec		
Schedule: None.		
Technical: None.		

Exhibit R-2a, PB 2010 Unit	ed States Spe	cial Operations	s Command R	DT&E Project	Justification			DATE: May 2	2009	
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)			R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development				t	PROJECT NU S200	JMBER	
COST (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
S200: SO Advanced Technology Development	54.695	65.684	31.675						Cont.	Cont.

A. Mission Description and Budget Item Justification

This project conducts rapid prototyping, Advanced Technology Demonstrations (ATDs) and Advanced Concept Technology Demonstrations (ACTDs) which are now called Joint Capability Technology Demonstrations. It provides a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by SOF users. This project integrates efforts with each other and conducts technology demonstrations in conjunction with joint experiments and other assessment events. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The project also addresses unique, joint special mission or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase. Efforts include:

Rapid Exploitation of Innovative Technologies. This initiative provides USSOCOM the ability to identify, assess and exploit emerging innovative technologies for SOF capability deficiencies and expedite technology transitions from the laboratory to operational use. These technologies will provide new transformational capabilities, while providing a compass for the direction of future SOF procurement.

Tagging, Tracking, and Locating (TTL) Technologies. Exploit emerging technologies to utilize the USSOCOM/DoD TTL Science & Technology Roadmap and the TTL Quick Look Capabilities Assessment. Exploit emerging technologies to locate and track targets or items of interest. Pursue advanced development and prototyping of TTL capabilities that have been proven to be feasible and operationally useful in Special Operations Advanced Technology Development.

National to Theater Transition. Conducts additional testing required to transition items from our national forces to theater forces.

Classified.

Iridium-Global Positioning System (I-GPS). Conducts a proof of concept study of I-GPS to evaluate the capability to provide handsets capable of using signals from iridium and GPS satellites to provide anti-jam, positioning, and timing accuracy capabilities.

Psychological Operations (PSYOP) "Global Reach" ACTD. Seeks technologies that will transform current PSYOP capabilities through two major objectives: 1) Exploit technologies capable of disseminating PSYOP products to reach target audiences across a variety of media into denied areas to include ranges up to 800 Nautical Miles, and 2) Automate and improve PSYOP planning and analytical capability through technologies that are integrated into SOF planning systems (Cultural Analysis, Targeting, Theme Development, Media & Product Selection, Distribution & Dissemination, Measures of Effectiveness).

Exhibit R-2a, PB 2010 United States Special Operations Command R	DATE : May 2009		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		PROJECT NUMBER
0400 - Research, Development, Test & Evaluation, Defense-Wide/BA	PE 1160402BB SO Advanced Technology Development		S200
3 - Advanced Technology Development (ATD)			

Command, Control, Communications, and Computer (C4) Technologies. Exploit emerging technologies to conduct ATDs that provide SOF with a robust C4 and Intelligence capability to ensure uninterrupted information exchange, influence situations to support mission accomplishment, and reduce an adversary's ability to use information. Exploit emerging technologies to conduct ATDs that provide SOF with increased sensory performance. Exploit emerging technologies to produce new and improved capabilities in information operations and psychological operations.

Mobility Technologies. Exploit emerging technologies to conduct ATDs that provide SOF with survivable mobility capabilities in high threat areas and with enhanced situational awareness. Exploit emerging technologies to conduct ATDs that provide SOF mobility assets with a reduction in logistic support requirements. Exploit emerging technologies to rapidly deploy and extract SOF personnel and craft. Exploit technologies to allow reconnaissance and conduct direct action in high threat areas using unmanned systems. Exploit technologies to reduce cost or enhance the performance of existing SOF platforms.

Sensor Technologies. Exploit emerging technologies to conduct ATDs that provide SOF with multi-role/multi-purpose weapons and demolitions with a broader range of potential effects and increased accuracy. Demonstrate capabilities of smart munitions and fire-and-forget capability. Exploit technologies to increase standoff from threat weapons systems. Decrease cost and logistic support requirements for SOF weapons systems.

SOF Warrior Technologies. Exploit emerging technologies to conduct ATDs that provide SOF with increased survivability and performance. Exploit emerging technologies to counter the threat of electro-optical devices and devices that detect human presence, and to enhance individual operator capabilities.

Additionally, this project executes the following efforts added by Congress:

Field Experimentation Program for Special Operations. Prototype and evaluate manned-unmanned platform and sensor networks to articulate new concepts of operation and employment for SOF.

Information Networking for Operational Reporting and Monitoring. Develop and test a capability that guarantees critical intelligence information is immediately disseminated.

Improved Information Transfer for Special Forces. Apply real-time knowledge management tools using information technologies and cognitive science to meet urgent Special Operations intelligence requirements.

Special Operations Portable Power Source. Research and develop Solid Oxide Fuel Cell technology for SOF power needs.

Exhibit R-2a, PB 2010 United States Special Operations Command R	chibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification DA				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		PROJECT NUMBER		
0400 - Research, Development, Test & Evaluation, Defense-Wide/BA	PE 1160402BB SO Advanced Technology Development		S200		
3 - Advanced Technology Development (ATD)					

Waterway Threat Detection Sensor System. Research and develop a lightweight sonar system for the detection of swimmers, unmanned underwater vehicles, mines and ships.

Photovoltaic Power Supply. Develop high efficiency photovoltaic power sources for the deployment of autonomous sensors.

Advanced Distributed Aperture System. Develop a Transformational Night Vision Augmentation System to Operate in No/Low-light Conditions and Adverse Weather.

Advanced Craft Technology Demonstrations to Quantify and Mitigate Operator Injury. Rapidly field two operational demonstrators for evaluation of a shock-mitigating craft with advanced composite material and advanced hull design to reduce operational injuries.

Autonomous Rendezvous/Formation Flight. Develop the capability for aircraft to maintain position while staying very stable in formation fixed to relative position of other aircraft in instrument meteorological conditions.

Partnership for Defense Innovation WiFi Test Laboratory. Rapidly evaluate and integrate Commercial Off-the- shelf (COTS) and Government Off –the- shelf (GOTS) secure wireless network technologies that are relevant to the SOF Warrior.

Expendable Airdrop Delivery System. Develop, test, and evaluate a capability that will provide precision delivery of specific critical items to deployed troops.

Micro-Power Special Operations Generator. Develop a low signature, rugged, 2-man-portable, multi-fuel, power generator for SOF missions.

Responsive Textiles. Develop a Special Forces protective combat uniform that is a seven piece base and thermal layering system to provide the troops flexibility and comfort in the most hostile environments.

Small Assault Vehicle Expeditionary. Provide upgrades and optimization to the Small Versatile Maritime Mobility Craft platform through hull design and engine replacement.

Technology Infusion Cell. Provide independent, unbiased research and rapid prototype development of emerging technologies to assist SOF to successfully train and fight the war on terror.

B. Accomplishments/Planned Program (\$ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Rapid Exploitation of Innovative Technologies for SOF (REITS)	0.000	0.000	14.794	

Exhibit R-2a, PB 2010 United States Special Operations Command R	RDT&E Project Justification		DATE: May 2	009	
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD) B. Accomplishments/Planned Program (\$ in Millions)				PROJECT NUMBER S200	
			FY 2009	FY 2010	FY 2011
Rapid Exploitation of Innovative Technologies for SOF (REITS)					
FY 2010 Plans: Initiate the ability to identify, assess, and exploit emerging innov deficiencies. REITS is intended to expedite demonstration and technologies.					
Tagging, Tracking, and Locating (TTL) Technologies		8.821	14.161	12.407	
Tagging, Tracking, and Locating (TTL) Technologies					
FY 2008 Accomplishments: Initiated projects from the USSOCOM/DoD TTL project databas proven relevant technologies (nanotechnology, biotechnology, a military utility for capability enhancements such as significant ret TTL devices and systems; detection and identification of objects development of new TTL modalities; novel techniques for data to and supporting capabilities required for TTL system integration, Exploited emerging technologies to locate and track targets or it leveraging and cooperative efforts with DOD, other government	and chemistry) to provide and demonstrate duction in form factor and packaging of s of interest at long distances, including ransmissions, sharing and processing; reliability, usability, and employment. ems of interest. Projects included				
FY 2009 Plans:					
Continue projects from the USSOCOM/DoD TTL project databa locate and track targets or items of interest. Projects include lev DOD, other government agencies, and industry.					

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification			DATE : May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 03 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development			PROJECT NU S200	MBER
3. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 2011
National to Theater Transition		0.000	0.000	1.973	
National to Theater Transition					
FY 2010 Plans: Conduct additional testing and evaluation required on various ed Theater Forces.	quipment items to transition to the SOF				
Iridium Global Positioning System (I-GPS)		0.000	4.279	0.000	
Iridium Global Positioning System (I-GPS)					
FY 2009 Plans: Conduct a proof of concept study of I-GPS to evaluate the capal signals from iridium and global positioning system satellites to praccuracy capabilities.					
PSYOP "Global Reach" ACTD		5.802	0.000	0.000	
PSYOP "Global Reach" ACTD					
FY 2008 Accomplishments: Continued the development and demonstration of advanced bro and other Unmanned Aerial System's (UAS), to include AM broauser evaluation on Predator B, Unmanned Aerial Vehicle (UAV) payloads. Transition Predator B FM payload and Wind Supported broadcast payloads. Continues PSYOP Planning and Analysis in fielding and transition software/hardware.	dcast systems. Perform extended for FM, TV and loudspeaker broadcast ed Air Delivery System UAS loudspeaker				
Classified		6.378	4.408	2.501	
			1		

UNCLASSIFIED

R-1 Line Item #65 Page 8 of 15

APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD) R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology		Development		PROJECT NUMBER S200	
3. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 201
FY 2008 Accomplishments: Details provided under separate cover.					
FY 2009 Plans: Details provided under separate cover.					
FY 2010 Plans: Details provided under separate cover.					
Command, Control, Communications, and Computers (C4) Technology	gies	0.138	1.731	0.000	
Command, Control, Communications, and Computers (C4) Techn	nologies				
FY 2008 Accomplishments: Continued to exploit emerging technologies to conduct ATDs that capability to ensure uninterrupted information exchange, influence accomplishment, and reduce an adversary's ability to use inform technologies to conduct ATDs that provide SOF with increased stechnology projects to address identified C4 capability gaps.	ce situations to support mission ation. Continued to exploit emerging				
FY 2009 Plans: Continue development and evaluation of FY08 efforts. Continue to conduct ATDs that provide SOF with a robust C4I capability to exchange, influence situations to support mission accomplishme to use information. Continue to exploit emerging technologies to increased sensory performance. Continue to exploit emerging te items of interest. Continue C4 technology projects to address id	ensure uninterrupted information ent, and reduce an adversary's ability conduct ATDs that provide SOF with echnologies to locate and track targets or				
Mobility Technologies		12.041	1.900	0.000	
Mobility Technologies					

UNCLASSIFIED

R-1 Line Item #65 Page 9 of 15

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification		DATE: May 2	PATE : May 2009			
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD) R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development		Development		PROJECT NUMBER S200		
B. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 2011	
FY 2008 Accomplishments: Continued to exploit emerging technologies to conduct ATDs that a reduction in logistic support requirements. Exploits emerging the extract SOF personnel and equipment. Exploits technologies to direct action in high threat areas using unmanned systems. Exploits enhance the performance of existing SOF platforms. Continued identified mobility capability gaps. Initiated Joint Sea Hunter and Combat Autonomous Mobility System Joint Concept Technology demonstrate the utility of modular, purpose-equipped, unmanned tasks. Additionally, this JCTD will develop tactics, techniques, a unmanned system technology within the SOF Direct Action and Developed Beyond-Line-of-Sight Satellite Communication data I Demonstrator (SLED) program.	technologies to rapidly deploy and allow reconnaissance and conduct alloits technologies to reduce cost or mobility technology projects to address distribution ATDs. Initiated Demonstration (JCTD) that will distributed vehicles in a wide range of SOF mission and procedures to effectively employ Surveillance Reconnaissance missions.					
FY 2009 Plans: Continue development and evaluation of FY08 efforts. Exploits that provide SOF mobility assets with a reduction in logistic supp technologies to rapidly deploy and extract SOF personnel and exallow reconnaissance and conduct direct action in high threat are technologies to reduce cost or enhance the performance of exist technology projects to address identified mobility capability gaps	port requirements. Exploits emerging quipment. Exploits technologies to eas using unmanned systems. Exploits ting SOF platforms. Continue mobility					
Sensor Technologies		3.196	2.850	0.000		
Sensor Technologies						
FY 2008 Accomplishments: Continued development and evaluation of FY07 efforts. Continuct and evaluation of FY07 efforts. Continuct and evaluation of FY07 efforts. Continued we range of potential effects and increased accuracy. Continued we	eapons and demolitions with a broader					

UNCLASSIFIED

R-1 Line Item #65 Page 10 of 15

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification			DATE: May 2009			
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development		PROJECT NUMBER S200			
B. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 2011	
address identified weapons/munitions capability gaps. Complete Ammunition	ed Enhanced Performance Long Range					
FY 2009 Plans: Continue development and evaluation of FY08 efforts. Continue conduct ATDs that provide SOF with multi-role/multi-purpose we range of potential effects and increased accuracy. Continue we address identified weapons/munitions capability gaps. Complete light weight machine guns.	eapons and demolitions with a broader apons/munitions technology projects to					
SOF Warrior Technologies		1.760	0.450	0.000		
SOF Warrior Technologies						
FY 2008 Accomplishments: This initiative was a Congressional add. Prototyped and evaluat sensor networks to articulate new concepts of operation and em						
FY 2009 Plans: This initiative is a Congressional add. Funds will continue FY08	efforts.					
Field Experimentation Program For SOF		1.549	1.556	0.000		
FY 2008 Accomplishments: This initiative was a Congressional add. Prototyped and evaluat sensor networks to articulate new concepts of operation and em						
FY 2009 Plans: This initiative is a Congressional add. Funds will continue FY08	efforts.					
SOF Portable Power Source		2.324	0.000	0.000		
SOF Portable Power Source						

UNCLASSIFIED

R-1 Line Item #65 Page 11 of 15

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification			DATE: May 2009			
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development			PROJECT NUMBER S200		
3. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 2011	
FY 2008 Accomplishments: This initiative was a Congressional add. Conducted research or power from a variety of fuels.	n systems to produce mobile electric					
Waterway Threat Detection Sensor System.		2.324	0.000	0.000		
Waterway Threat Detection Sensor System.						
FY 2008 Accomplishments: This initiative was a Congressional add. Refined development a swimmers, unmanned underwater vehicles, and ship detection.	and tested a lightweight sonar system for					
Improved Information Transfer For Special Forces		3.100	2.334	0.000		
Improved Information Transfer For Special Forces						
FY 2008 Accomplishments: This initiative was a Congressional add. Continued application of tools using information technologies and cognitive science to me requirements.						
FY 2009 Plans: This initiative is a Congressional add. Funds will continue FY08	development.					
Information Networking for Operational and Monitoring		1.937	0.000	0.000		
Information Networking for Operational and Monitoring						
FY 2008 Accomplishments: This initiative was a Congressional add. Developed and tested a intelligence information is immediately disseminated to deployed						
Photovoltaic Power Supply		0.964	2.334	0.000		

UNCLASSIFIED

R-1 Line Item #65 Page 12 of 15

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification			DATE : May 2009				
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development			PROJECT NUMBER S200			
B. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 2011		
Photovoltaic Power Supply							
FY 2008 Accomplishments: This initiative was a Congressional add. Developed high-efficient deployment of autonomous sensors	ncy photovoltaic power sources for the						
FY 2009 Plans: This initiative is a Congressional add. Funds will continue FY08	development efforts.						
Advanced Distributed Aperture System		0.000	20.540	0.000			
Advanced Distributed Aperture System							
FY 2008 Accomplishments: This initiative is a Congressional add. Develop a transformation operate in no/low-light conditions and adverse weather.	al night vision augmentation system to						
Advanced Craft Tech Demonstrations to Quantify and Mitigate Opera	ator Injury	0.000	1.945	0.000			
Advanced Craft Tech Demonstrations to Quantify and Mitigate O	perator Injury						
FY 2009 Plans: This initiative is a Congressional add. Develop the capability for very stable in formation fixed to relative position of other aircraft							
Partnership for Defense Innovation WiFi Test Laboratory		2.615	1.945	0.000			
Partnership for Defense Innovation WiFi Test Laboratory							
FY 2008 Accomplishments: This initiative was a Congressional add. Rapidly evaluate and in (COTS) and Government Off-the-shelf (GOTS) secure wireless the SOF Warrior.							

UNCLASSIFIED

R-1 Line Item #65 Page 13 of 15

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification		DATE: May 2	DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 400 - Research, Development, Test & Evaluation, Defense-Wide/BA - Advanced Technology Development (ATD)			PROJECT NUMBER S200		
B. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 201
FY 2009 Plans: This initiative is a Congressional add. Continue FY08 efforts					
Expendable Airdrop Delivery System		0.780	0.000	0.000	
Expendable Airdrop Delivery System					
FY 2008 Accomplishments: This initiative was a Congressional add. Develop, test, and evalue precision delivery of specific critical items to deployed troops.	uate a capability that will provide				
Micro-Power Special Operations Generator		0.000	1.556	0.000	
Micro-Power Special Operations Generator					
FY 2009 Plans: This initiative is a Congressional add. Develop a low signature, regenerator for SOF missions.	rugged, 2-man-portable, multi-fuel, power				
Responsive Textiles		0.966	0.000	0.000	
Responsive Textiles					
FY 2008 Accomplishments: This initiative was a Congressional add. Develop a Special Forceseven piece base and thermal layering system to provide the trophostile environments.					
Small Assault Vehicle Expeditionary		0.000	0.778	0.000	
Small Assault Vehicle Expeditionary					

Exhibit R-2a, PB 2010 United States Special Operations Command RDT&E Project Justification			DATE : May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 3 - Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB SO Advanced Technology Development			PROJECT NUMBER S200	
3. Accomplishments/Planned Program (\$ in Millions)		FY 2008	FY 2009	FY 2010	FY 201
FY 2009 Plans: This initiative is a Congressional add. Provides upgrade and op Mobility Craft platform through hull design and engine replacement.					
Technology Infusion Cell		0.000	0.972	0.000	
Technology Infusion Cell					
FY 2009 Plans: This initiative is a Congressional add. Provide independent, un development of emerging technologies to assist SOF to success contingency operations.					
Autonomous Rendezvous/Formation Flight		0.000	1.945	0.000	
FY 2009 Plans: This initiative is a Congressional add. Develop the capability for very stable in formation fixed to relative position of other aircraft					

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A